

Claims (Attorney Docket No. LeA 35 012)

1. (Currently amended) An automatable method for identifying cancer cells and their precursors, characterized in that at least two molecular markers in a single cell or a tissue sample are detected simultaneously comprising the steps of
 - contacting the cell sample ~~or tissue sample~~ with color marked reagents that specifically bind to the molecular markers,
 - simultaneously detecting signal intensities of color mixtures resulting from the markers, and
 - combining and accrediting the signal intensities.
2. (Currently amended) The method according to claim 1, further characterized in that an automatic information processing is linked to a diagnostic expert system which consolidates the image information into a proposed diagnosis.
3. (Currently amended) The method according to claim 1, wherein the molecular markers are detected quantitatively by analyzing the signal intensities of chromogenic color reactions or fluorescence signals in constituent regions of the cell ~~or tissue sample~~, with color mixtures or the spatial proximity of the individual colors providing additional information as compared with single stainings.
4. (Previously presented) The method according to claim 1, wherein marker combinations are selected from the group consisting of:
her2/neu and Ki67, her2/neu and p53, her2/neu and bcl-2, her2/neu and MN, her2/neu and mdm-2, her2/neu and EGF receptor, bcl-2 and Ki67, bcl-2 and MN, bcl-2 and mdm-2, bcl-2 and EGF receptor, her2/neu and bcl-2, p53 and bcl-2, p53 and MN, p53 and mdm-2, p53 and EGF receptor, p16 and p53, p16 and MN, p16 and mdm-2, p16 and EGF receptor, p16 and Ki67, p16 and her2/neu, p16 and bcl-2, MN and mdm-2, MN and EGF receptor, mdm-2 and EGF receptor.
5. (Previously presented) The method according to claim 1, characterized in that tumors of the mammary gland, the lung, the cervix, the colon, the skin and the prostate are detected.
6. (Cancelled).

7. (Previously presented) A test kit for implementing the method according to claim 1 comprising reagents for detecting molecular makers, auxiliary agents, reagents for staining cells, controls, and protocols.